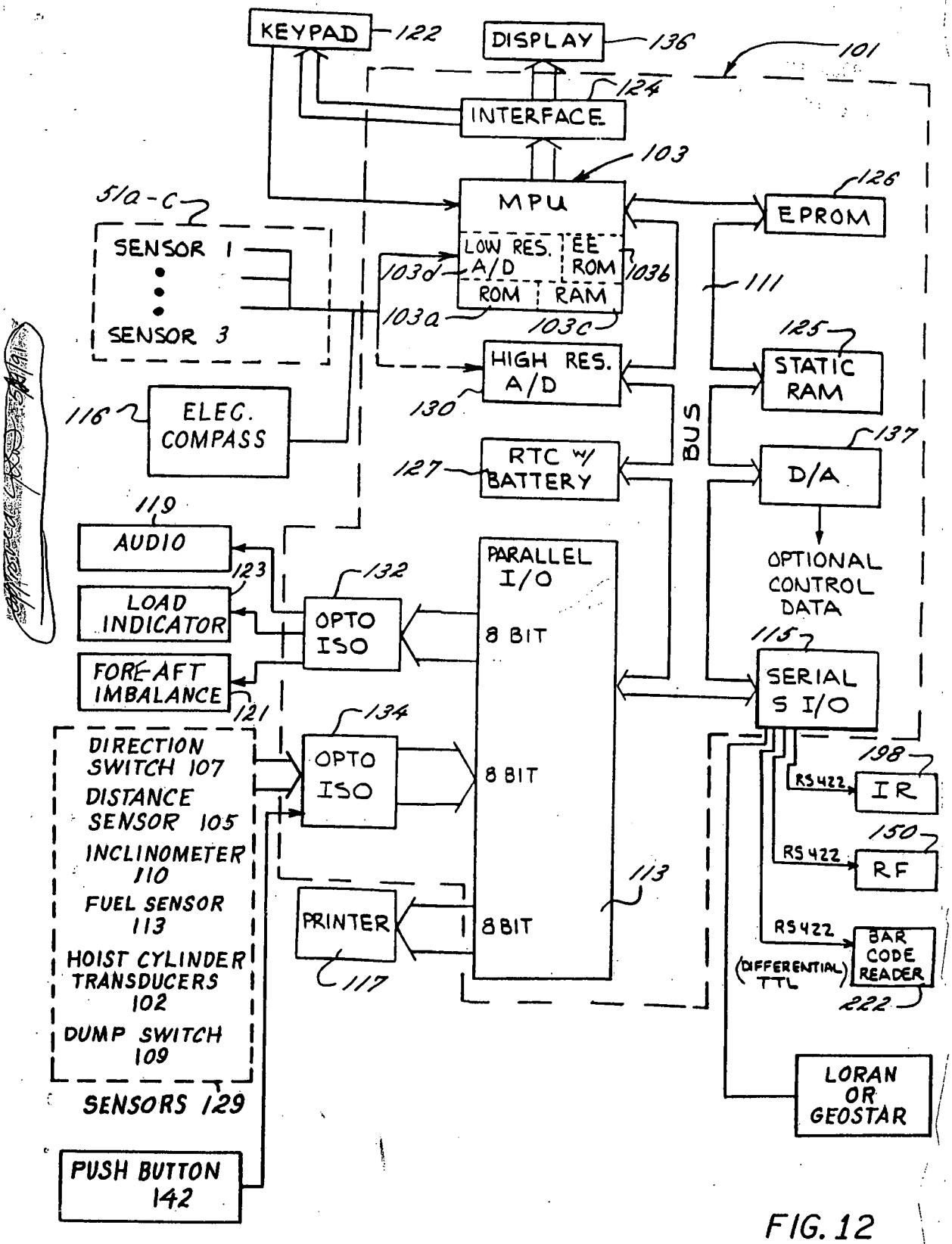
KEYPAD
122
DISPLAY
136
101
INTERFACE
124
103
MPU
LOW RES. A/D
EE ROM
ROM
RAM
1036
1030
103a
103c
126
EPROM
111
125
STATIC RAM
510-C
SENSOR 1
SENSOR 3
HIGH RES. A/D
130
116
ELEC. COMPASS
127
RTC w/ BATTERY
BUS
137
D/A
OPTIONAL CONTROL DATA
119
AUDIO
123
LOAD INDICATOR
FORE-AFT IMBALANCE
121
132
OPTO ISO
PARALLEL I/O
8 BIT
115
SERIAL S I/O
134
OPTO ISO
8 BIT
198
RS422
IR
150
RS422
RF
DIRECTION SWITCH 107
DISTANCE SENSOR 105
INCLINOMETER 110
FUEL SENSOR 113
HOIST CYLINDER TRANSDUCERS 102
DUMP SWITCH 109
SENSORS 129
PRINTER
8 BIT
113
117
RS422
(DIFFERENTIAL TTL)
BAR CODE READER
222
LORAN OR GEOSTAR
PUSH BUTTON 142

FIG. 12

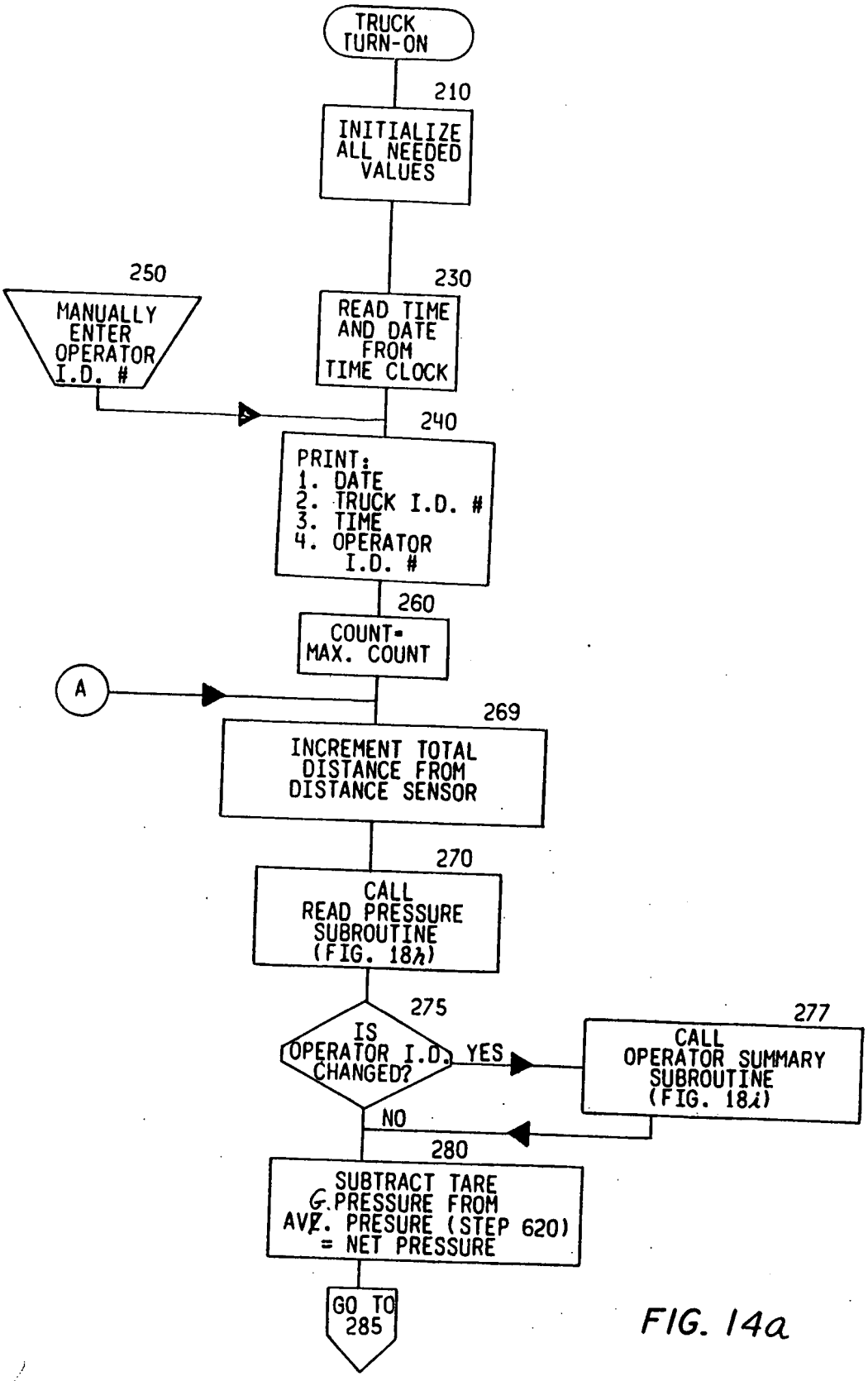
TRUCK TURN-ON
210
INITIALIZE ALL NEEDED VALUES
250
MANUALLY ENTER OPERATOR I.D. #
230
READ TIME AND DATE FROM TIME CLOCK
240
PRINT:
1. DATE
2. TRUCK I.D. #
3. TIME
4. OPERATOR I.D. #
260
COUNT=MAX. COUNT
A
269
INCREMENT TOTAL DISTANCE FROM DISTANCE SENSOR
270
CALL READ PRESSURE SUBROUTINE (FIG. 18h)
275
IS OPERATOR I.D. CHANGED?
YES
277
CALL OPERATOR SUMMARY SUBROUTINE (FIG. 18i)
NO
280
SUBTRACT TARE G. PRESSURE FROM AVG. PRESURE (STEP 620) = NET PRESSURE
GO TO 285

FIG. 14a

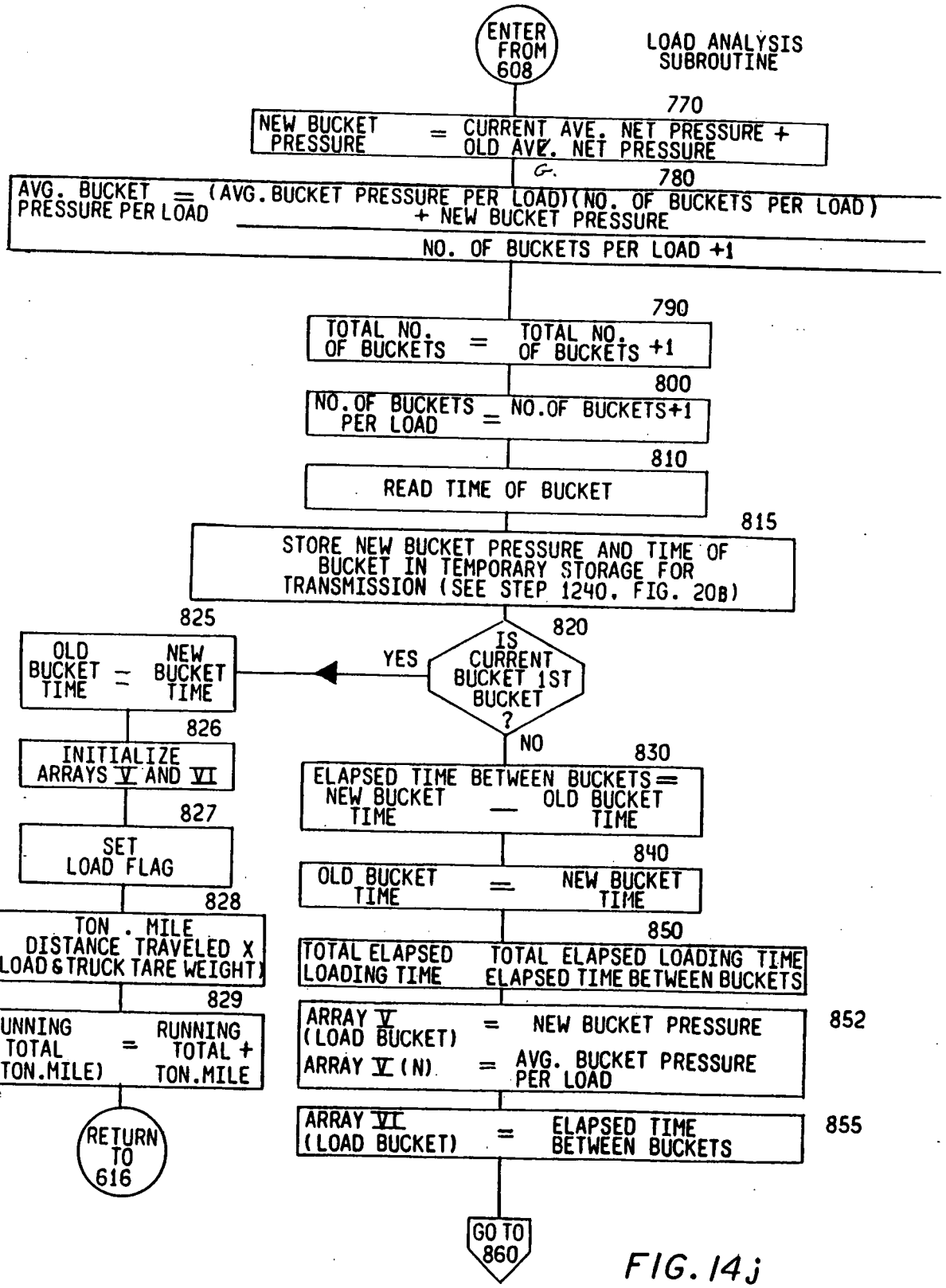
ENTER FROM 608
LOAD ANALYSIS SUBROUTINE
770
NEW BUCKET PRESSURE = CURRENT AVE. NET PRESSURE + OLD AVE. NET PRESSURE
780
AVG. BUCKET PRESSURE PER LOAD = (AVG. BUCKET PRESSURE PER LOAD)(NO. OF BUCKETS PER LOAD) + NEW BUCKET PRESSURE / NO. OF BUCKETS PER LOAD +1
790
TOTAL NO. OF BUCKETS = TOTAL NO. OF BUCKETS +1
800
NO. OF BUCKETS PER LOAD = NO. OF BUCKETS+1
810
READ TIME OF BUCKET
815
STORE NEW BUCKET PRESSURE AND TIME OF BUCKET IN TEMPORARY STORAGE FOR TRANSMISSION (SEE STEP 1240, FIG. 20B)
820
IS CURRENT BUCKET 1ST BUCKET ?
YES
NO
825
OLD BUCKET TIME = NEW BUCKET TIME
826
INITIALIZE ARRAYS V AND VI
827
SET LOAD FLAG
828
TON . MILE DISTANCE TRAVELED X (LOAD & TRUCK TARE WEIGHT)
829
RUNNING TOTAL (TON.MILE) = RUNNING TOTAL + TON.MILE
RETURN TO 616
830
ELAPSED TIME BETWEEN BUCKETS = NEW BUCKET TIME — OLD BUCKET TIME
840
OLD BUCKET TIME = NEW BUCKET TIME
850
TOTAL ELAPSED LOADING TIME = TOTAL ELAPSED LOADING TIME + ELAPSED TIME BETWEEN BUCKETS
852
ARRAY V (LOAD BUCKET) = NEW BUCKET PRESSURE
ARRAY V (N) = AVG. BUCKET PRESSURE PER LOAD
855
ARRAY VI (LOAD BUCKET) = ELAPSED TIME BETWEEN BUCKETS
GO TO 860

FIG. 14j

LOAD ANALYSIS SUBROUTINE (CONT.)

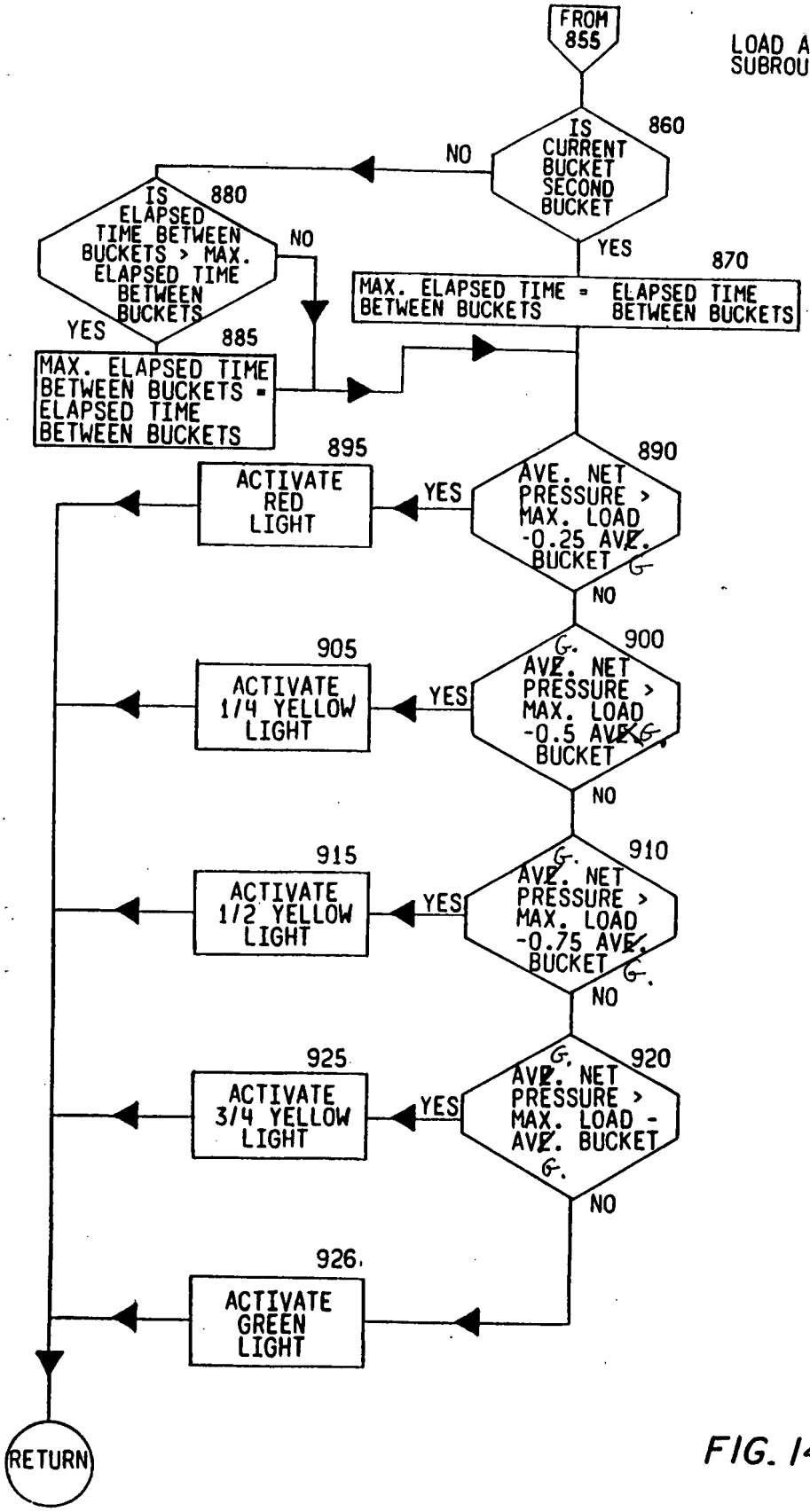


FIG. 14k

LOAD ANALYSIS ROUTINE

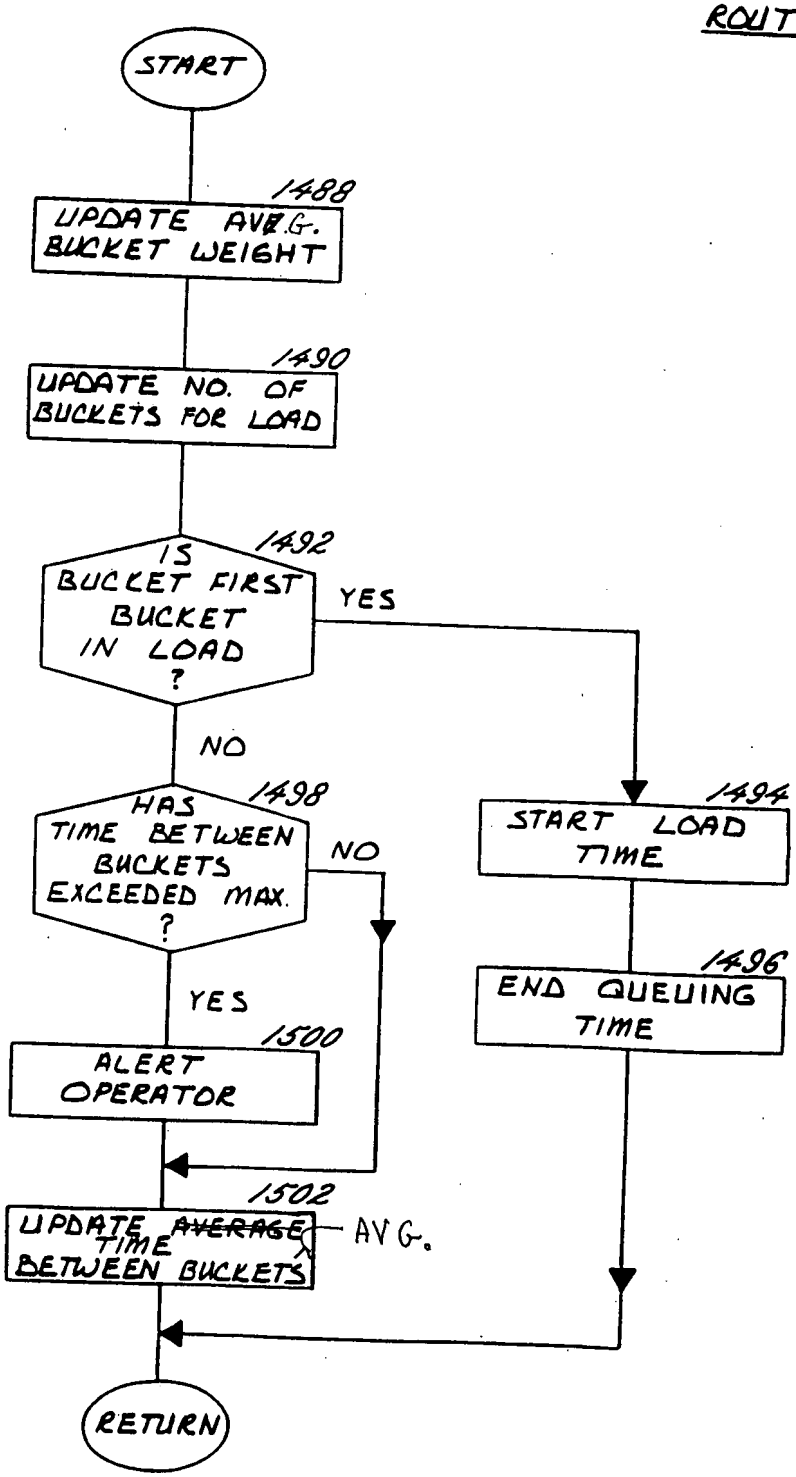


FIG. 24